



## Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard ( 29CFR 1910.1200)

**Product name** ANSULITE 3x3 AR-AFFF LV (A334-LV)

### 1. Identification

#### 1.1. Product Identifier

**Product name** ANSULITE 3x3 AR-AFFF LV (A334-LV)

#### 1.2. Other means of identification

**Product code** 442865

**Synonyms** None

**Chemical Family** No information available

#### 1.3. Recommended use of the chemical and restrictions on use

**Recommended use** Fire extinguishing agent.

**Uses advised against** Consumer use.

#### 1.4. Details of the Supplier of the Safety Data Sheet

**Company Name** Tyco Fire Protection Products  
One Stanton Street  
Marinette, WI 54143-2542  
Telephone: 715-735-7411  
**Contact point** Product Stewardship at 1-715-735-7411  
**E-mail address** psra@tycofp.com

#### 1.5. Emergency Telephone Number

**Emergency telephone** CHEMTREC 001-800-424-9300 or 001-703-527-3887

### 2. Hazards Identification

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation - Category 2A

#### 2.2. Label Elements

##### Signal Word

WARNING

##### Hazard Statements

Causes serious eye irritation



#### Precautionary Statements



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 2 / 9

#### **Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Wear eye/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

#### **2.3. Hazards Not Otherwise Classified (HNOC)**

Not Applicable.

#### **2.4. Other Information**

### **3. Composition/information on Ingredients**

#### **3.1. Mixture**

The following component(s) in this product are considered hazardous under applicable OSHA(USA)

| Chemical name                      | CAS No.     | weight-% |
|------------------------------------|-------------|----------|
| 2-(2-Butoxyethoxy)ethanol          | 112-34-5    | 7 - 13   |
| D-Glucopyranoside, C9-C11 Oligomer | 132778-08-6 | 1 - 5    |

### **4. First aid measures**

#### **4.1. Description of first aid measures**

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.             |
| <b>Skin contact</b> | Wash skin with soap and water. Get medical attention if irritation develops and persists.  |
| <b>Inhalation</b>   | Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).             |
| <b>Ingestion</b>    | Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately. |

#### **4.2. Most Important Symptoms and Effects, Both Acute and Delayed**

**Symptoms** No information available.

#### **4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Note to physicians** Treat symptomatically.

### **5. Fire-fighting measures**

#### **5.1. Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### **5.2. Unsuitable Extinguishing Media**

None.

#### **5.3. Specific Hazards Arising from the Chemical**

None known.



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 3 / 9

**Hazardous Combustion  
Products**

Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

**5.4. Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**5.5. Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

**For emergency responders** Use personal protection recommended in Section 8.

**6.2. Environmental Precautions**

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

**6.3. Methods and material for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Pick up and transfer to properly labeled containers.

**7. Handling and Storage**

**7.1. Precautions for Safe Handling**

**Advice on safe handling** Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

**7.2. Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure Controls/Personal Protection**

**8.1. Control Parameters**

**Exposure guidelines**

| Chemical name                         | ACGIH TLV                                   | OSHA PEL | NIOSH IDLH | Mexico OEL |
|---------------------------------------|---|----------|------------|------------|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | TWA: 10 ppm inhalable<br>fraction and vapor | -        | -          | -          |

ACGIH (American Conference of Governmental Industrial Hygienists) OSHA (Occupational Safety and Health Administration of the US Department of Labor) NIOSH IDLH Immediately Dangerous to Life or Health



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 4 / 9

## 8.2. Appropriate Engineering Controls

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

## 8.3. Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Avoid contact with eyes. Tight sealing safety goggles.

**Skin and Body Protection** Wear protective gloves and protective clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Ventilation** Use local exhaust or general dilution ventilation to control exposure with applicable limits

## 8.4. General hygiene considerations

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

# 9. Physical and Chemical Properties

## 9.1. Information on basic physical and chemical properties

|                               |                     |                         |              |
|-------------------------------|---------------------|-------------------------|--------------|
| Physical State                | Liquid              |                         |              |
| Odor                          | Characteristic      | Color                   | Light yellow |
| Odor Threshold                | No data available   |                         |              |
| <b>Property</b>               | <b>Values</b>       | <b>Remarks • Method</b> |              |
| pH                            | 7                   |                         |              |
| Melting point/freezing point  | No data available   |                         |              |
| Boiling point / boiling range | 100 °C / 212 °F     |                         |              |
| Flash Point                   | > 100 °C / > 212 °F |                         |              |
| Evaporation Rate              | No data available   |                         |              |
| Flammability (solid, gas)     | No data available   |                         |              |
| Flammability limit in air     |                     |                         |              |
| Upper flammability limit:     | No data available   |                         |              |
| Lower flammability limit:     | No data available   |                         |              |
| Vapor Pressure                | No data available   |                         |              |
| Vapor Density                 | No data available   |                         |              |
| Specific gravity              | No data available   |                         |              |
| Water Solubility              | No data available   |                         |              |
| Solubility in Other Solvents  | No data available   |                         |              |
| Partition coefficient         | No data available   |                         |              |
| Autoignition Temperature      | No data available   |                         |              |
| Decomposition Temperature     | No data available   |                         |              |
| Kinematic viscosity           | No data available   |                         |              |
| VOC content (%)               | 15.42887            |                         |              |
| Density                       | 1.01                |                         |              |

## 10. Stability and Reactivity



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 5 / 9

#### **10.1. Chemical Stability**

Stable under recommended storage conditions.

#### **10.2. Reactivity**

No data available

#### **10.3. Possibility of hazardous reactions**

None under normal processing.

##### **Hazardous Polymerization**

Hazardous polymerization does not occur.

#### **10.4. Conditions to Avoid**

Extremes of temperature and direct sunlight.

#### **10.5. Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

#### **10.6. Hazardous decomposition products**

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

### **11. Toxicological Information**

#### **11.1. Information on Likely Routes of Exposure**

##### **Product information**

|              |                              |
|--------------|------------------------------|
| Inhalation   | No data available.           |
| Eye Contact  | Severely irritating to eyes. |
| Skin contact | No data available.           |
| Ingestion    | No data available.           |

##### **Component Information**

##### **Acute Toxicity**

| Chemical name                         | Oral LD50            | Dermal LD50             | Inhalation LC50 |
|---------------------------------------|----------------------|-------------------------|-----------------|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | = 5660 mg/kg ( Rat ) | = 2700 mg/kg ( Rabbit ) | -               |

#### **11.2. Information on Toxicological Effects**

**Symptoms** No information available.

**11.3.** Delayed and immediate effects as well as chronic effects from short and long-term exposure

|  |                              |
|--|------------------------------|
| <b>Serious eye damage/eye irritation</b> | Severely irritating to eyes. |
| <b>Carcinogenicity</b>                   | No information available.    |
| <b>Reproductive Toxicity</b>             | No information available.    |
| <b>STOT - Single Exposure</b>            | No information available.    |
| <b>STOT - Repeated Exposure</b>          | No information available.    |
| <b>Aspiration Hazard</b>                 | No information available.    |

#### 11.4. Numerical Measures of Toxicity - Product information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 22171 mg/kg  
ATEmix (dermal) 23945 mg/kg

### 12. Ecological Information

#### 12.1. Ecotoxicity

| Chemical name                         | Algae/aquatic plants   | Fish  | Crustacea   |
|---------------------------------------|--|---|---|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | EC50 (96h) > 100 mg/L<br>Desmodesmus subspicatus   | LC50 (96h) static = 1300 mg/L<br>Lepomis macrochirus  | EC50 (48h) > 100 mg/L Daphnia magna<br>EC50 (24h) = 2850 mg/L Daphnia magna             |
| 1,2-Propanediol<br>57-55-6            | EC50 (96h) = 19000 mg/L<br>Pseudokirchneriella subcapitata   | LC50 (96h) static = 51600 mg/L<br>Oncorhynchus mykiss LC50 (96h) static = 51400 mg/L Pimephales promelas LC50 (96h) = 710 mg/L Pimephales promelas LC50 (96h) static 41 - 47 mL/L Oncorhynchus mykiss   | EC50 (48h) Static > 1000 mg/L Daphnia magna EC50 (24h) > 10000 mg/L Daphnia magna       |
| n-Butanol<br>71-36-3                  | EC50 (96h) > 500 mg/L<br>Desmodesmus subspicatus EC50 (72h) > 500 mg/L Desmodesmus subspicatus                             | LC50 (96h) static = 1910000 µg/L Pimephales promelas LC50 (96h) static 1730 - 1910 mg/L Pimephales promelas LC50 (96h) flow-through = 1740 mg/L Pimephales promelas LC50 (96h) static 100000 - 500000 µg/L Lepomis macrochirus  | EC50 (48h) Static 1897 - 2072 mg/L Daphnia magna EC50 (48h) = 1983 mg/L Daphnia magna   |
| Sodium chloride<br>7647-14-5          | -  | LC50 (96h) flow-through 4747 - 7824 mg/L Oncorhynchus mykiss LC50 (96h) semi-static = 7050 mg/L Pimephales promelas LC50 (96h) static = 12946 mg/L Lepomis macrochirus LC50 (96h) static 6020 - 7070 mg/L Pimephales promelas LC50 (96h) flow-through 5560 - 6080 mg/L Lepomis macrochirus LC50 (96h) static 6420 - 6700 mg/L Pimephales promelas | EC50 (48h) Static 340.7 - 469.2 mg/L Daphnia magna EC50 (48h) = 1000 mg/L Daphnia magna |
| Glycerol<br>56-81-5                   | -  | LC50 (96h) static 51 - 57 mL/L Oncorhynchus mykiss  | EC50 (24h) > 500 mg/L Daphnia magna   |
| Sodium Hydrogen Carbonate<br>144-55-8 | EC50 (120h) = 650 mg/L Nitzschia linearis  | LC50 (96h) static 8250 - 9000 mg/L Lepomis macrochirus  | EC50 (48h) = 2350 mg/L Daphnia magna  |
| Hexamethylenetetramine<br>100-97-0    | -  | LC50 (96h) flow-through 44600 - 55600 mg/L Pimephales promelas  | EC50 (48h) 29868 - 43390 mg/L Daphnia magna   |
| Methylene chloride<br>75-09-2         | EC50 (72h) > 500 mg/L Pseudokirchneriella subcapitata<br>EC50 (96h) > 500 mg/L Pseudokirchneriella subcapitata             | LC50 (96h) static = 193 mg/L Lepomis macrochirus LC50 (96h) flow-through = 193 mg/L Lepomis macrochirus LC50 (96h) static 262 - 855 mg/L Pimephales promelas LC50 (96h) flow-through 140.8 - 277.8 mg/L Pimephales promelas   | EC50 (48h) Static 1532 - 1847 mg/L Daphnia magna EC50 (48h) = 190 mg/L Daphnia magna    |
| 1,3-Dichloropropene<br>542-75-6       | EC50 (96h) 2.45 - 6.45 mg/L Pseudokirchneriella subcapitata<br>EC50 (72h) 3.12 - 10.5 mg/L Pseudokirchneriella subcapitata | LC50 (96h) semi-static = 4.5 mg/L Oncorhynchus mykiss LC50 (96h) = 2 mg/L Oncorhynchus mykiss LC50 (96h) static 1.52 - 2.68 mg/L Pimephales promelas LC50 (96h) static 5.1 - 6.8 mg/L Lepomis macrochirus LC50 (96h) static 3.1 -   | EC50 (48h) Static 0.063 - 0.129 mg/L Daphnia magna EC50 (48h) = 0.09 mg/L Daphnia magna |



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 7 / 9

|  |   |   |   |
|--|---|---|---|
|  |   | 4.9 mg/L Oncorhynchus mykiss<br>LC50 (96h) flow-through 0.211 -<br>0.271 mg/L Pimephales promelas |   |
| 4,4'-bis-(sulfostyryl)-biphenyl<br>disodium salt<br>27344-41-8 | EC50 (72h) = 10 mg/L<br>Desmodemus subspicatus EC50<br>(96h) 10.0 - 11.0 mg/L<br>Desmodemus subspicatus | LC50 (96h) static = 76 mg/L<br>Brachydanio rerio  | EC50 (48h) = 1000 mg/L Daphnia<br>magna |

## 12.2. Persistence and Degradability

### Chemical Oxygen Demand (mg/L)

|             |         |
|-------------|---------|
| Concentrate | 330,000 |
| 3% Solution | 12,000  |

### Concentrate Biological Oxygen Demand (mg/L)

|                                   |        |
|-----------------------------------|--------|
| Biological Oxygen Demand (5 Day)  | 110000 |
| %BOD/COD                          | 33.33  |
| Biological Oxygen Demand (10 Day) | 190000 |
| %BOD/COD                          | 57.58  |
| Biological Oxygen Demand (15 Day) | 230000 |
| %BOD/COD                          | 69.7   |
| Biological Oxygen Demand (20 Day) | 240000 |
| %BOD/COD                          | 72.73  |

### 3% Solution Biological Oxygen Demand (mg/L)

|                                   |       |
|-----------------------------------|-------|
| Biological Oxygen Demand (5 Day)  | 2600  |
| %BOD/COD                          | 21.67 |
| Biological Oxygen Demand (10 Day) | 7400  |
| %BOD/COD                          | 61.67 |
| Biological Oxygen Demand (15 Day) | 8500  |
| %BOD/COD                          | 70.83 |
| Biological Oxygen Demand (20 Day) | 8900  |
| %BOD/COD                          | 74.17 |

## 12.3. Bioaccumulation

No information available.

## 12.4. Other Adverse Effects

No information available

## 13. Disposal Considerations

### 13.1. Waste Treatment Methods

#### Disposal of wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### Contaminated Packaging

Do not reuse container.

## 14. Transport Information



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 8 / 9

|                   |               |
|-------------------|---------------|
| <u>DOT</u>        | NOT REGULATED |
| <u>TDG</u>        | NOT REGULATED |
| <u>MEX</u>        | NOT REGULATED |
| <u>ICAO (air)</u> | NOT REGULATED |
| <u>IATA</u>       | NOT REGULATED |
| <u>IMDG</u>       | NOT REGULATED |

## 15. Regulatory Information

### 15.1. International Inventories

|         |                 |
|---------|-----------------|
| TSCA    | Complies        |
| DSL/NDL | Does not comply |
| ENCS    | Does not comply |
| IECSC   | Does not comply |
| KECL    | Does not comply |
| PICCS   | Does not comply |
| AICS    | Complies        |

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

### 15.2. US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name                        | SARA 313 - Threshold Values % |
|--------------------------------------|-------------------------------|
| 2-(2-Butoxyethoxy)ethanol - 112-34-5 | 1.0                           |

#### SARA 311/312 Hazard Categories

|                                   |     |
|-----------------------------------|-----|
| Acute Health Hazard               | Yes |
| Chronic health hazard             | No  |
| Fire Hazard                       | No  |
| Sudden Release of Pressure Hazard | No  |
| Reactive Hazard                   | No  |

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and



Product code 442865

/ Product name ANSULITE 3x3 /  
AR-AFFF LV (A334-LV)

PAGE 9 / 9

Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### 15.3. US State Regulations

#### California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical name                     | California Proposition 65 |
|-----------------------------------|---------------------------|
| Perfluorooctanoic acid - 335-67-1 | Developmental Toxicity    |
| Methylene chloride - 75-09-2      | Carcinogen                |
| 1,3-Dichloropropene - 542-75-6    | Carcinogen                |

#### U.S. State Right-to-Know Regulations

| Chemical name                         | New Jersey | Massachusetts | Pennsylvania |
|---------------------------------------|------------|---------------|--------------|
| 2-(2-Butoxyethoxy)ethanol<br>112-34-5 | X          | -             | X            |
| 1,2-Propanediol<br>57-55-6            | X          | -             | X            |
| n-Butanol<br>71-36-3                  | X          | X             | X            |
| Hexamethylenetetramine<br>100-97-0    | X          | -             | -            |
| Methylene chloride<br>75-09-2         | X          | X             | X            |
| 1,3-Dichloropropene<br>542-75-6       | X          | X             | X            |

### 16. Other information, including date of preparation of the last revision

|             |                  |                |                    |                                    |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b> | Health Hazards 1 | Flammability 1 | Instability 0      | Physical and chemical properties - |
| <b>HMIS</b> | Health Hazards 1 | Flammability 1 | Physical Hazards 0 | Personal Protection X              |

Revision date 17-Jan-2019

Revision note SDS sections updated, 12.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet